

Fig. 1

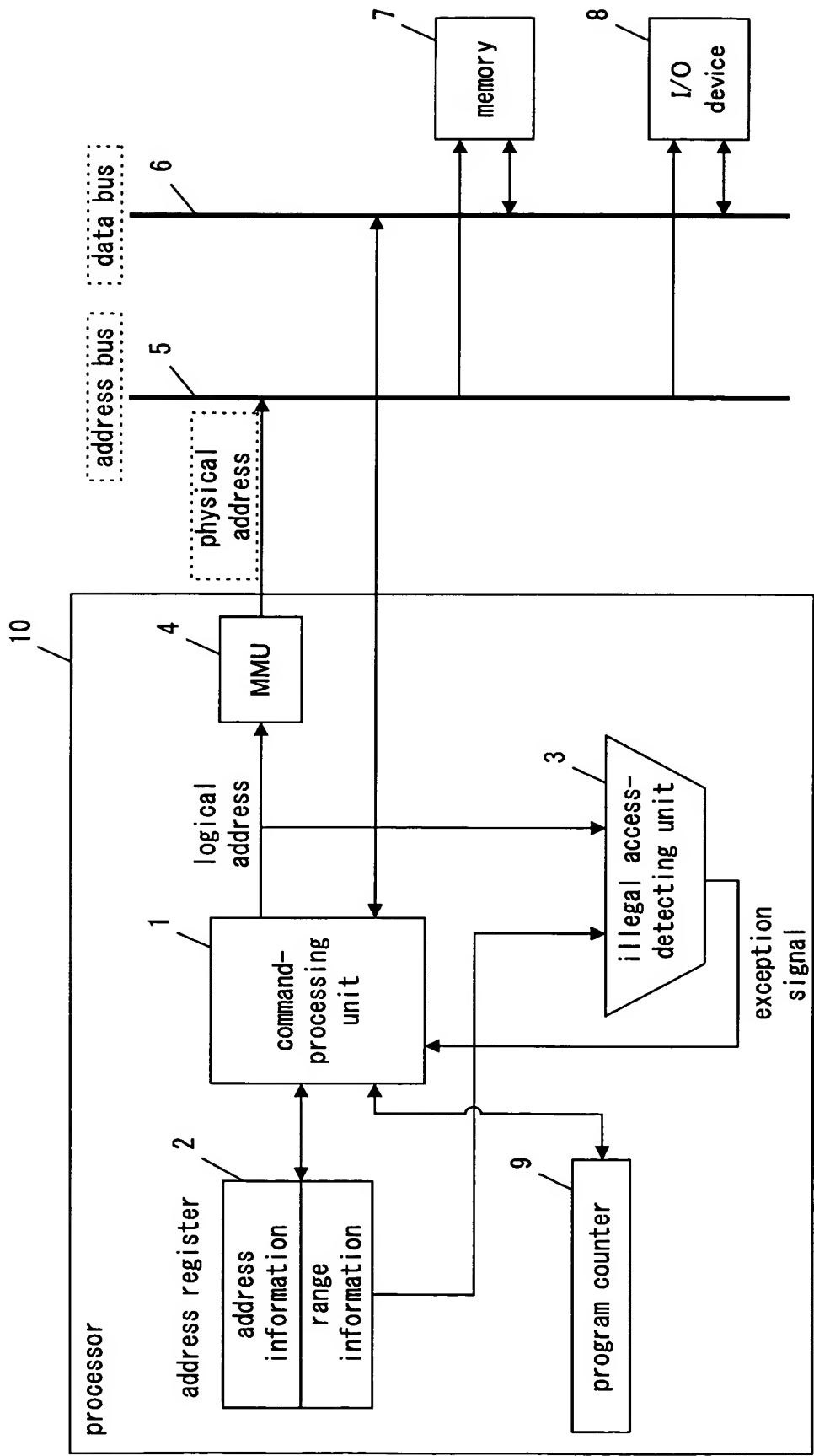


Fig. 2(a)

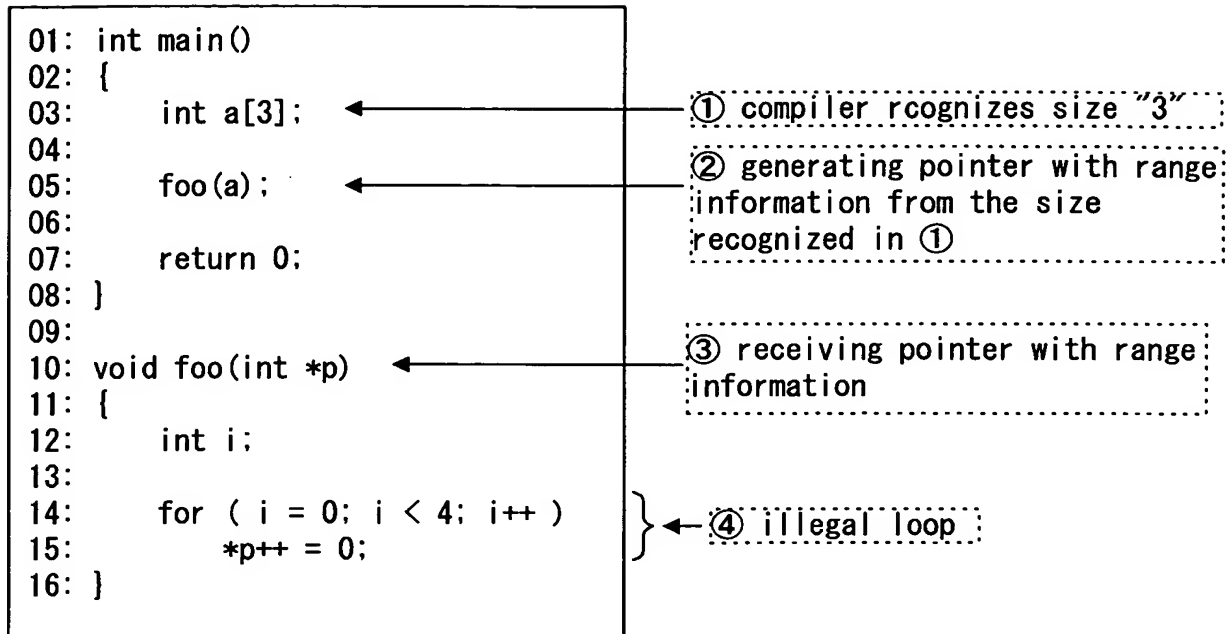


Fig. 2(b)

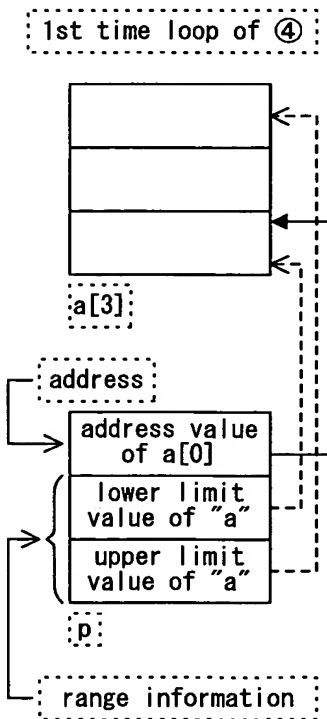


Fig. 2(c)

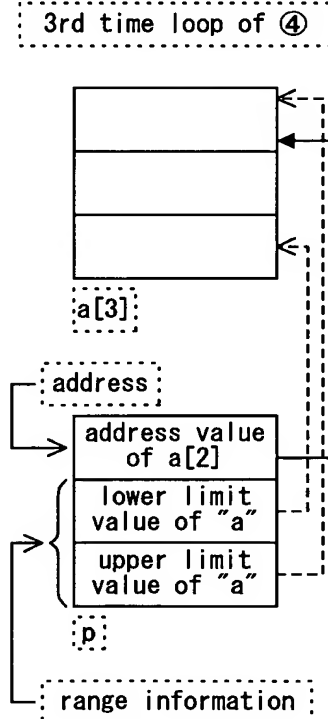


Fig. 2(d)

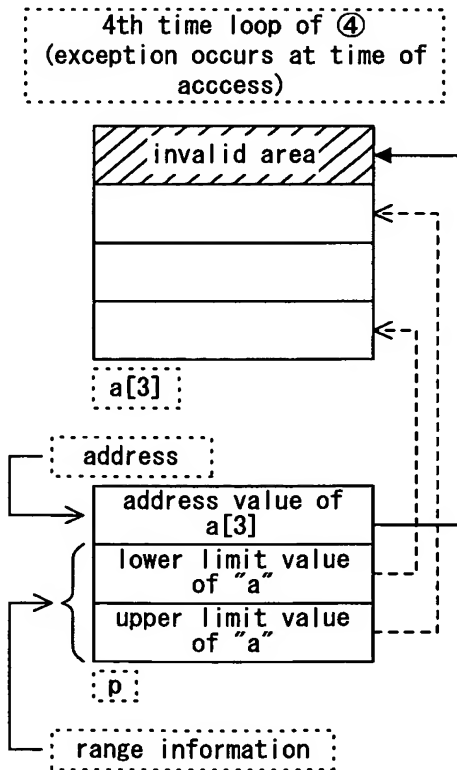


Fig. 3(a)

```
01: extern void input_str(char *str);
02:
03: int main()
04: {
05:     char buf[32];
06:     int len = 0;
07:
08:     input_str(buf);
09:
10:     while ( buf[len] != 0)
11:         len++;
12:
13:     printf( "%dThis is a character.%n" , len);
14:
15:     return 0;
16: }
```

source code (main.c)

Fig. 3(b)

```
01: void input_str(char *str)
02: {
03:     int c;
04:
05:     while((c = getchar()) != EOF)
06:         *str++ = c;
07: }
```

source code (input\_int.c)

Fig. 3(c)

```
main.c:
    char[] UPPER          :upper expanding
    *      FIXED          :fixed size

input_str.c:
    *      FIXED          :fixed size
```

failure recovering information file

Fig. 4(a)

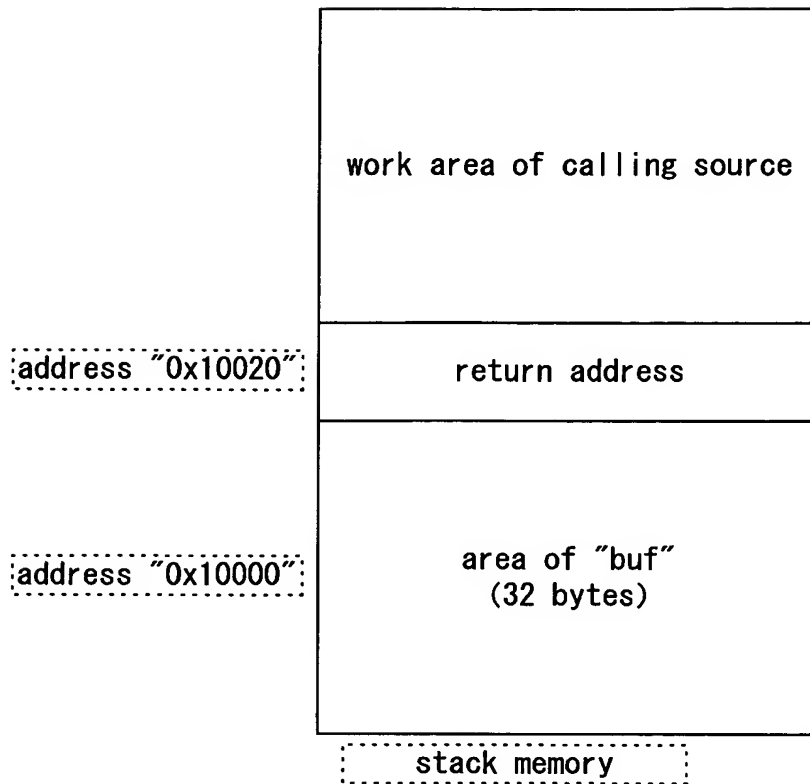


Fig. 4(b)

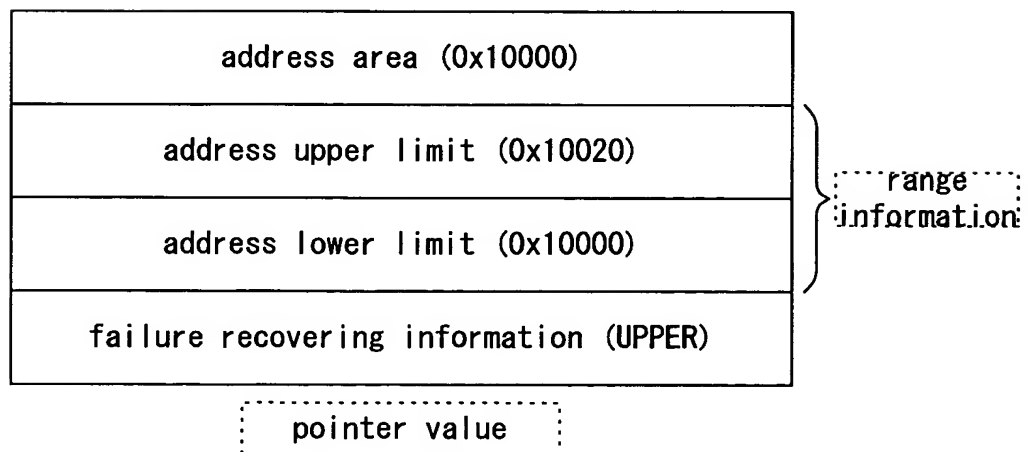


Fig. 5(a)

```

01: char a[5];
02:
03: extern void foo(char *p);
04:
05: int main()
06: {
07:     foo(&a[1]);
08:
09:     return 0;
10: }

```

source code in C language

Fig. 5(b)

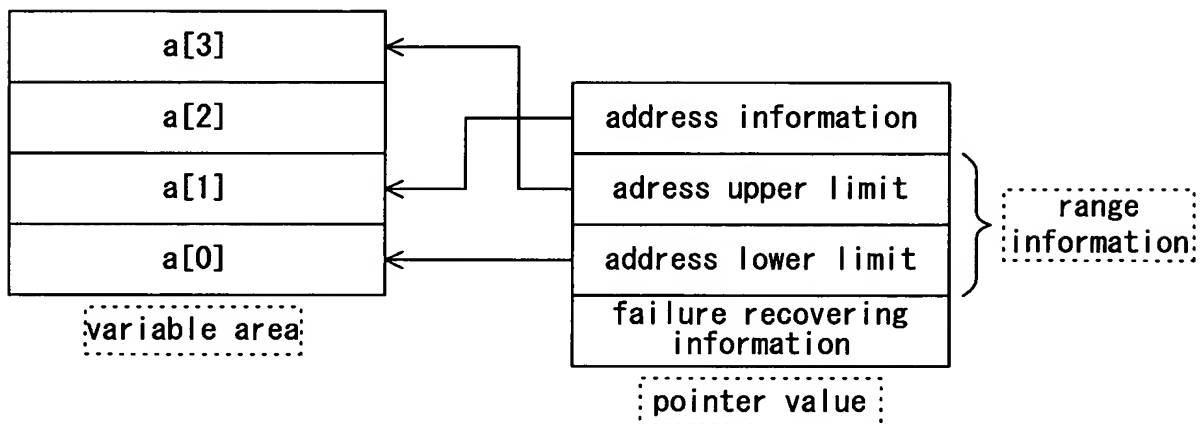


Fig. 6

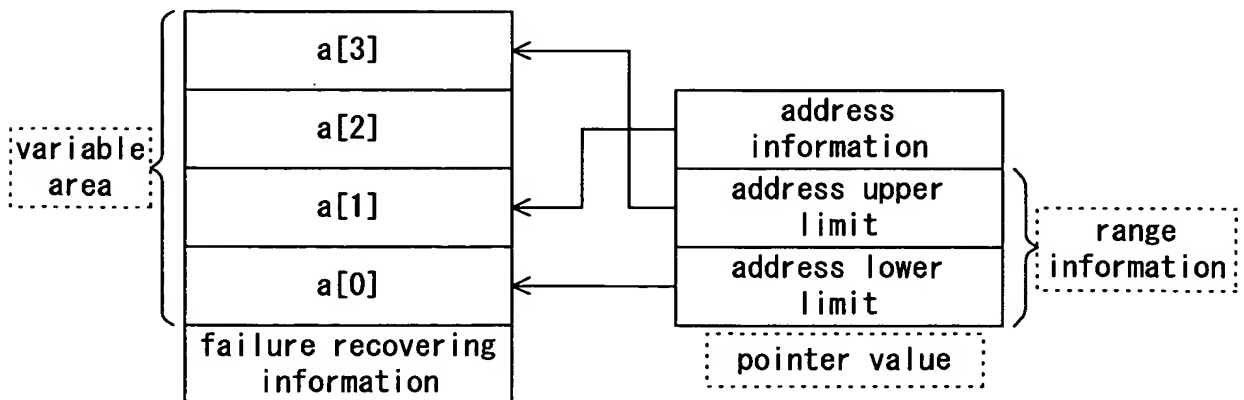


Fig. 7

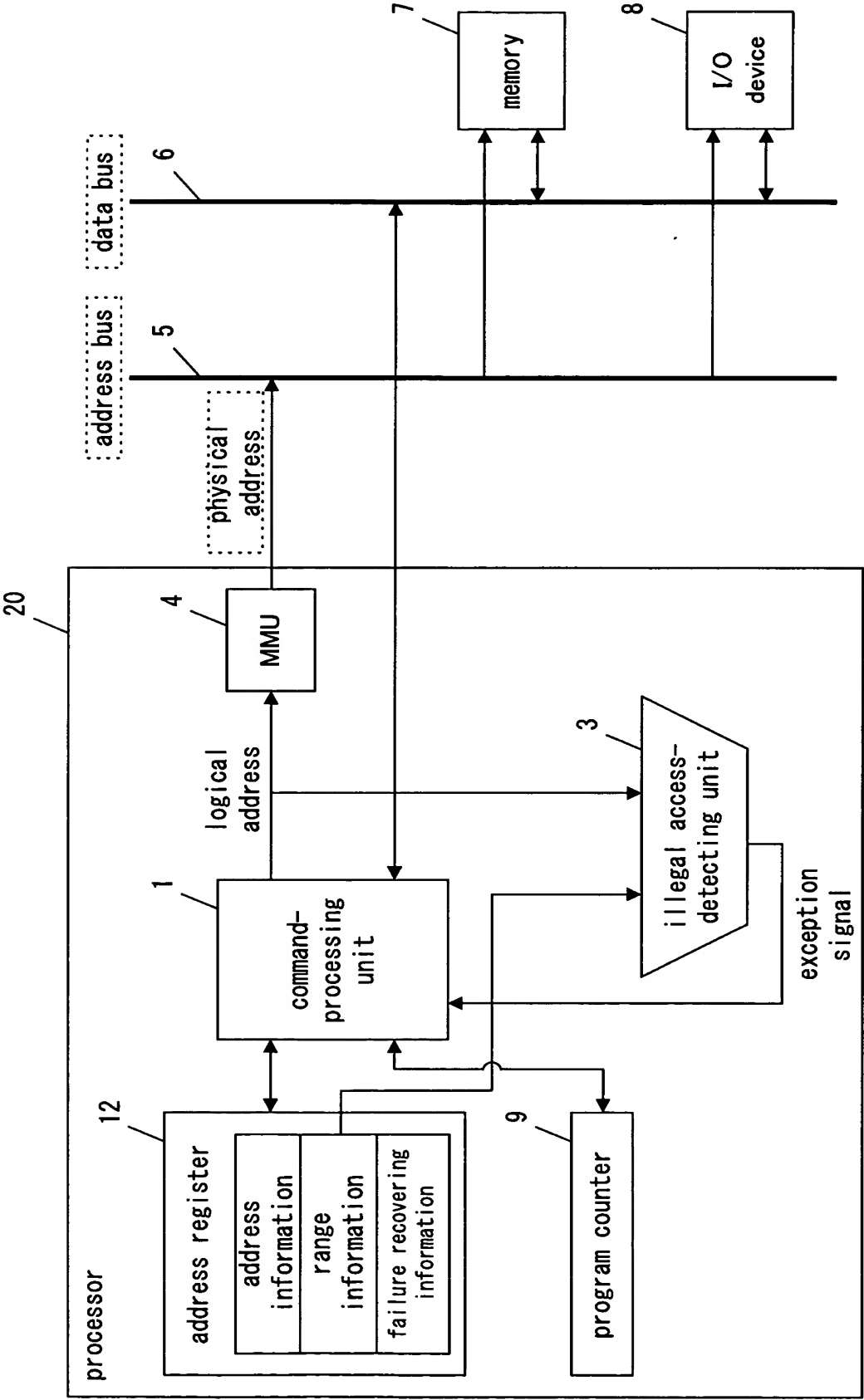


Fig. 8

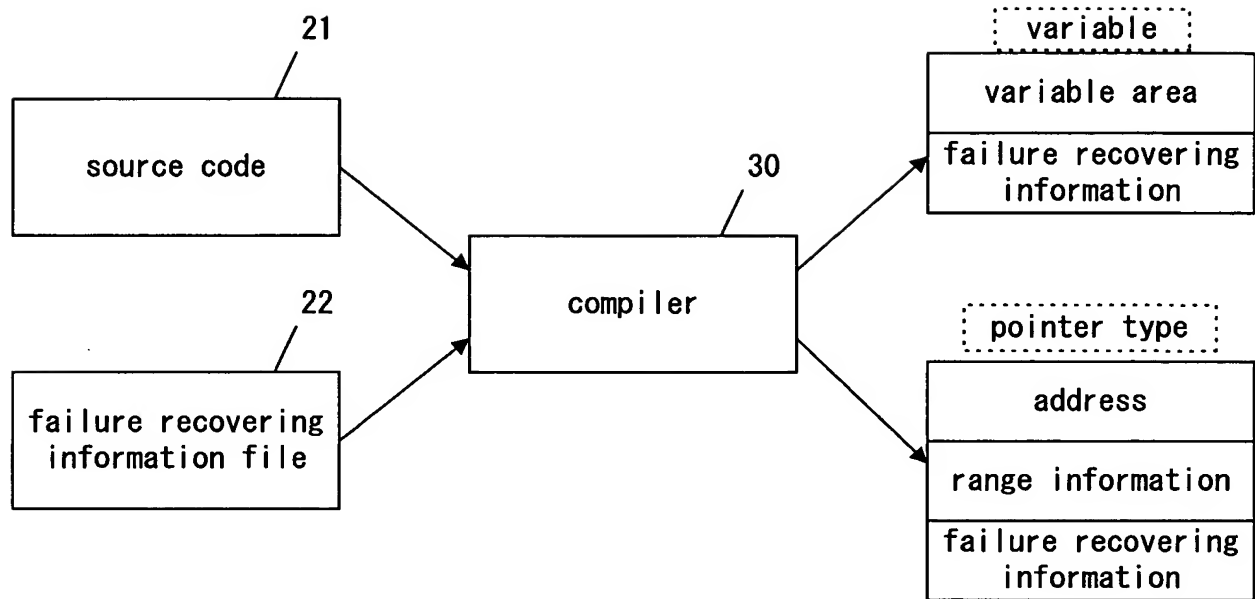


Fig. 9

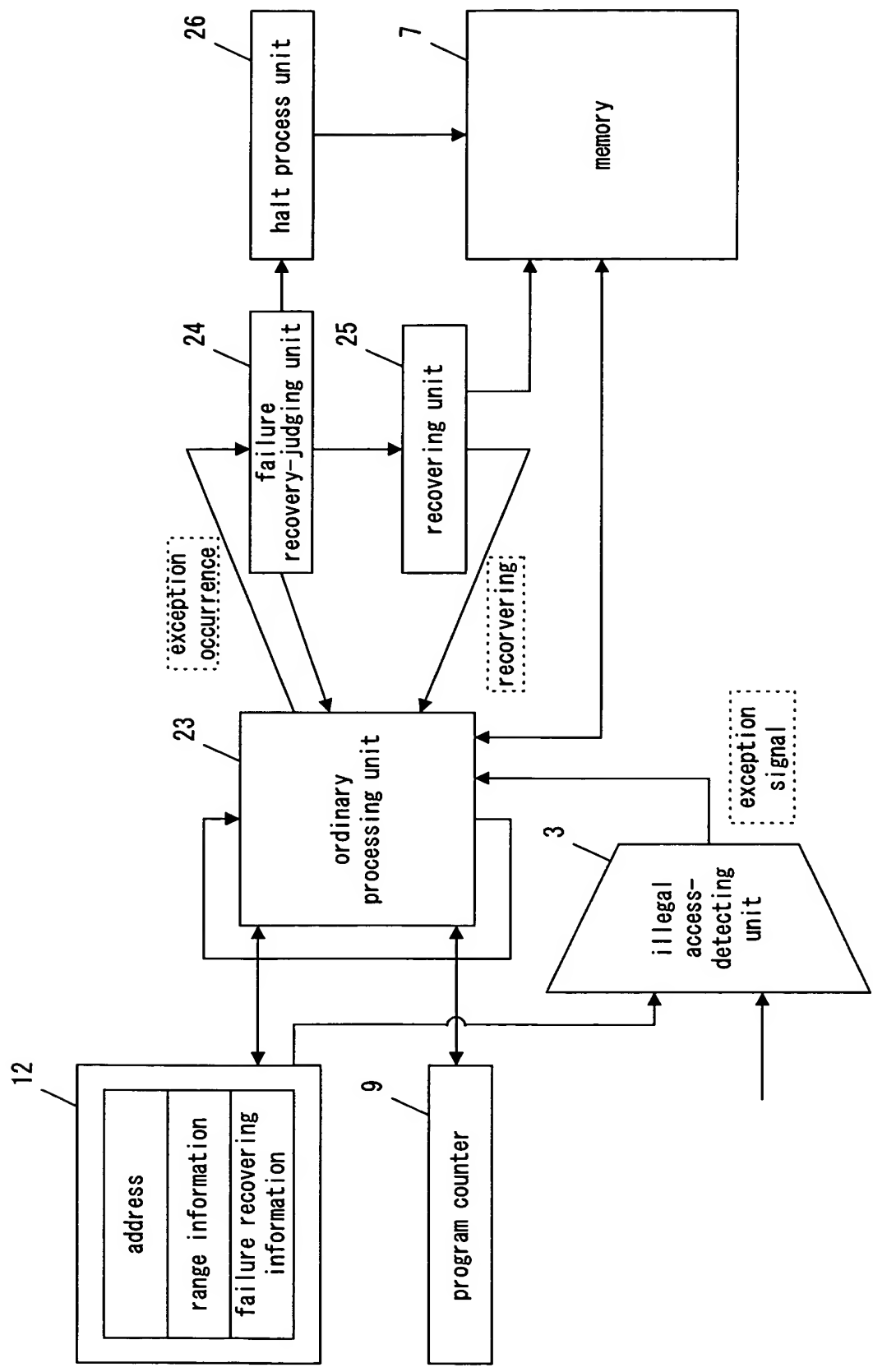




Fig. 10

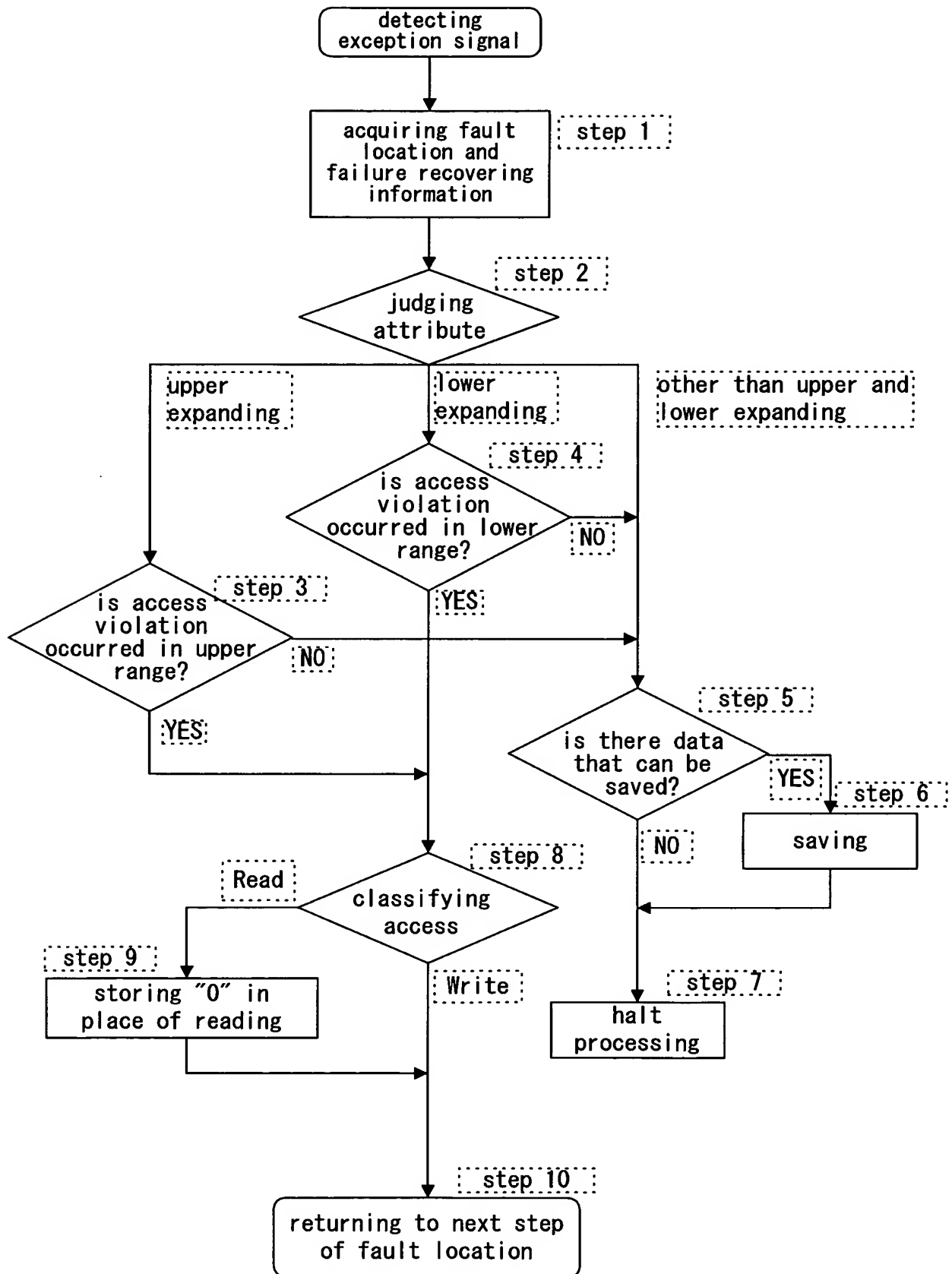


Fig. 11

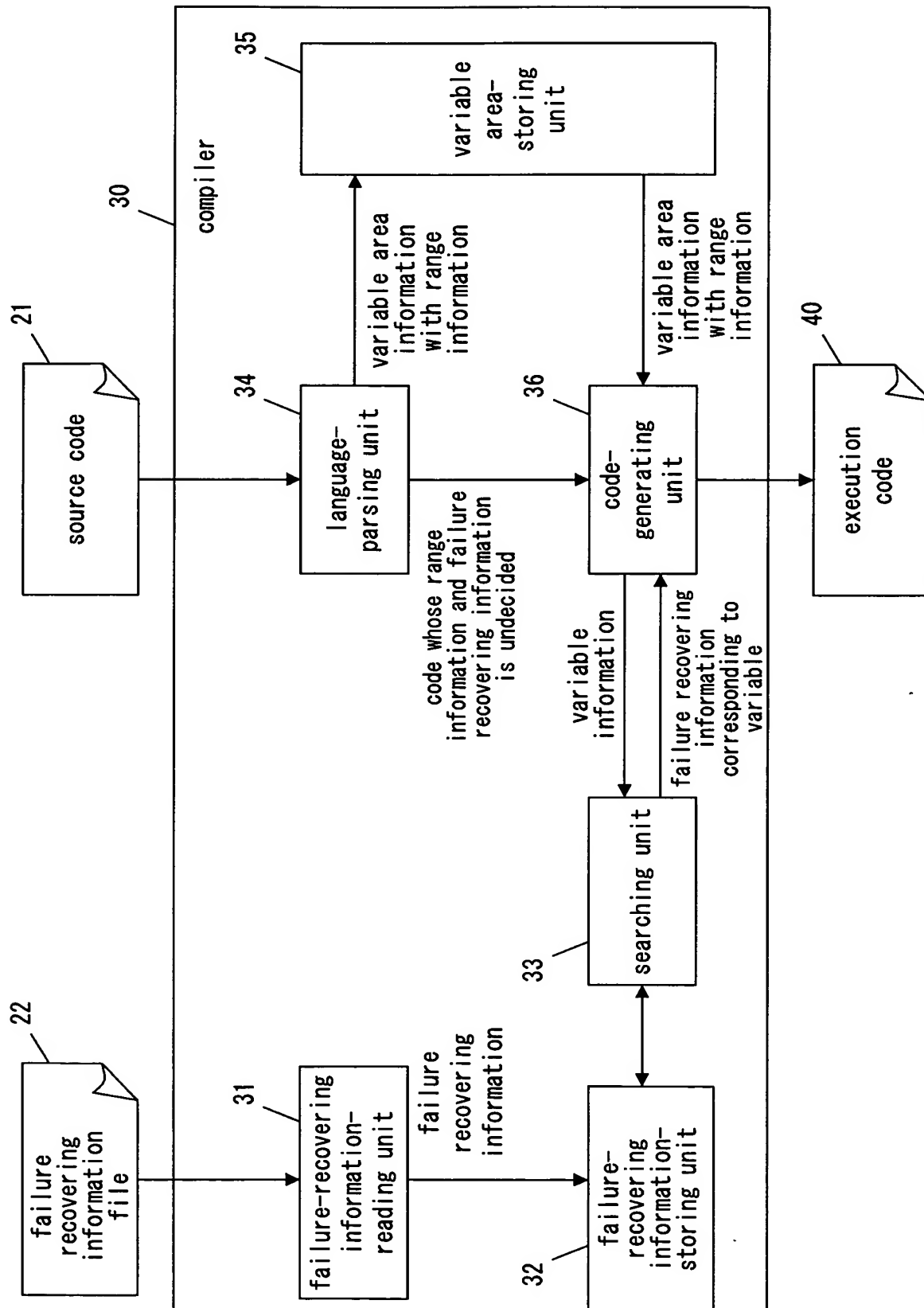


Fig. 12

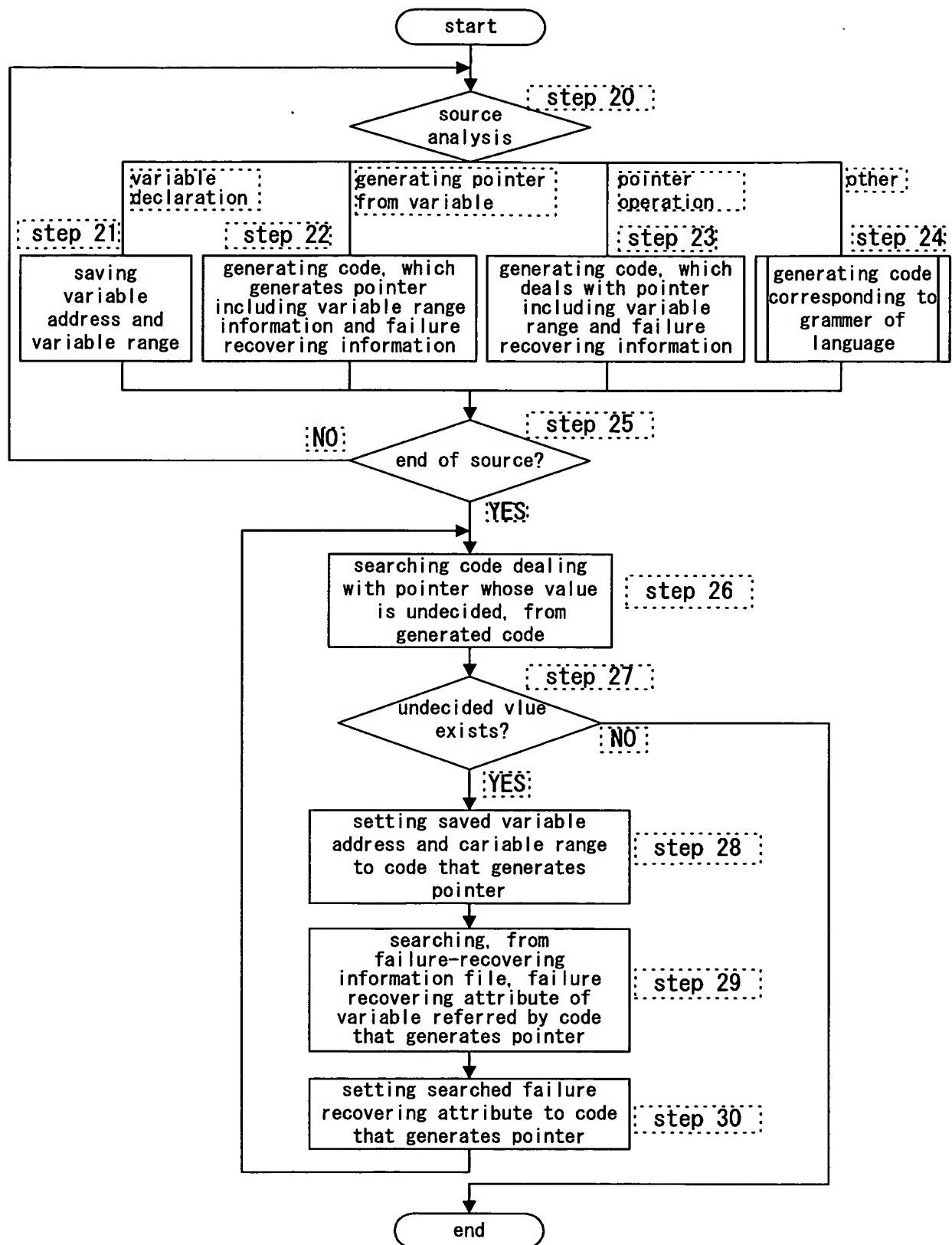


Fig. 13

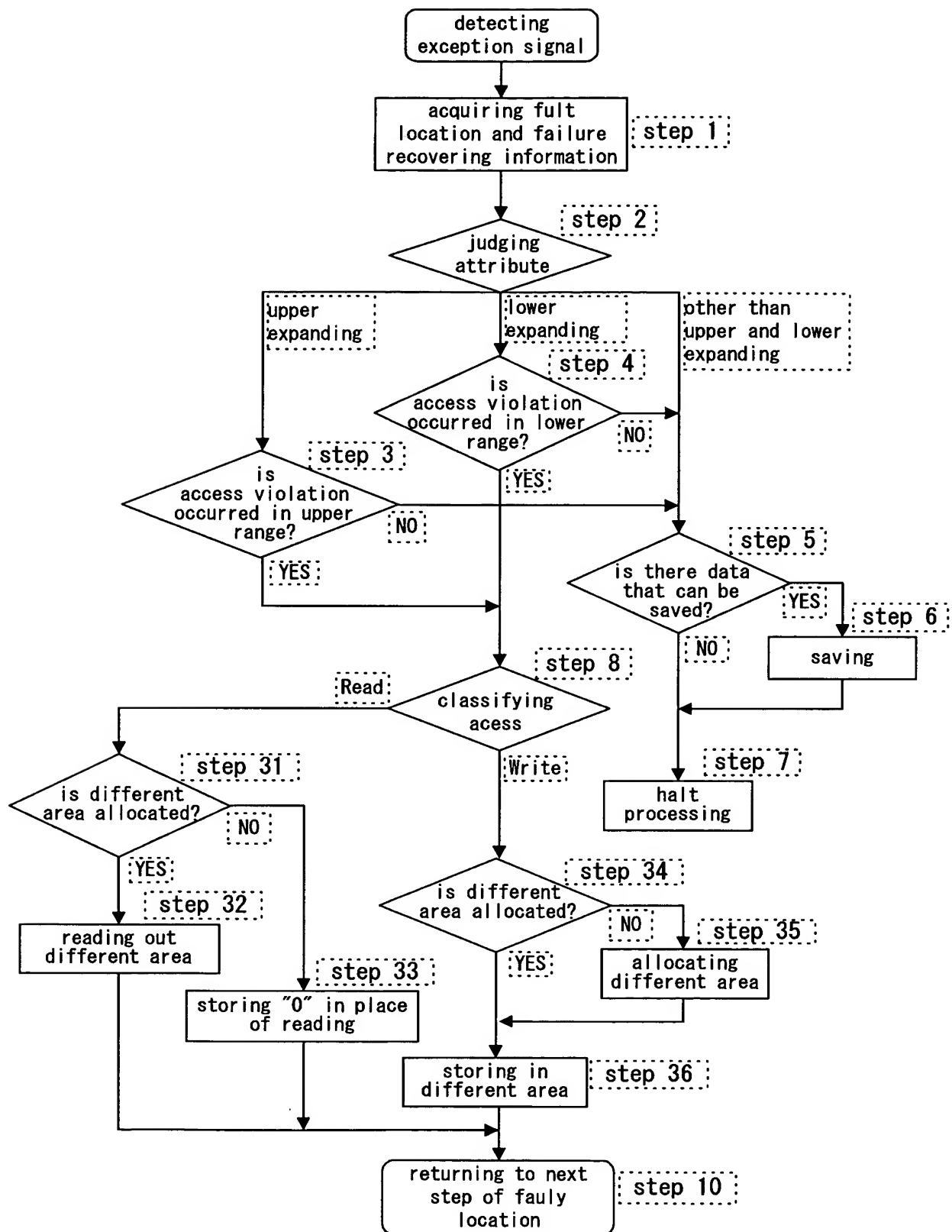


Fig. 14

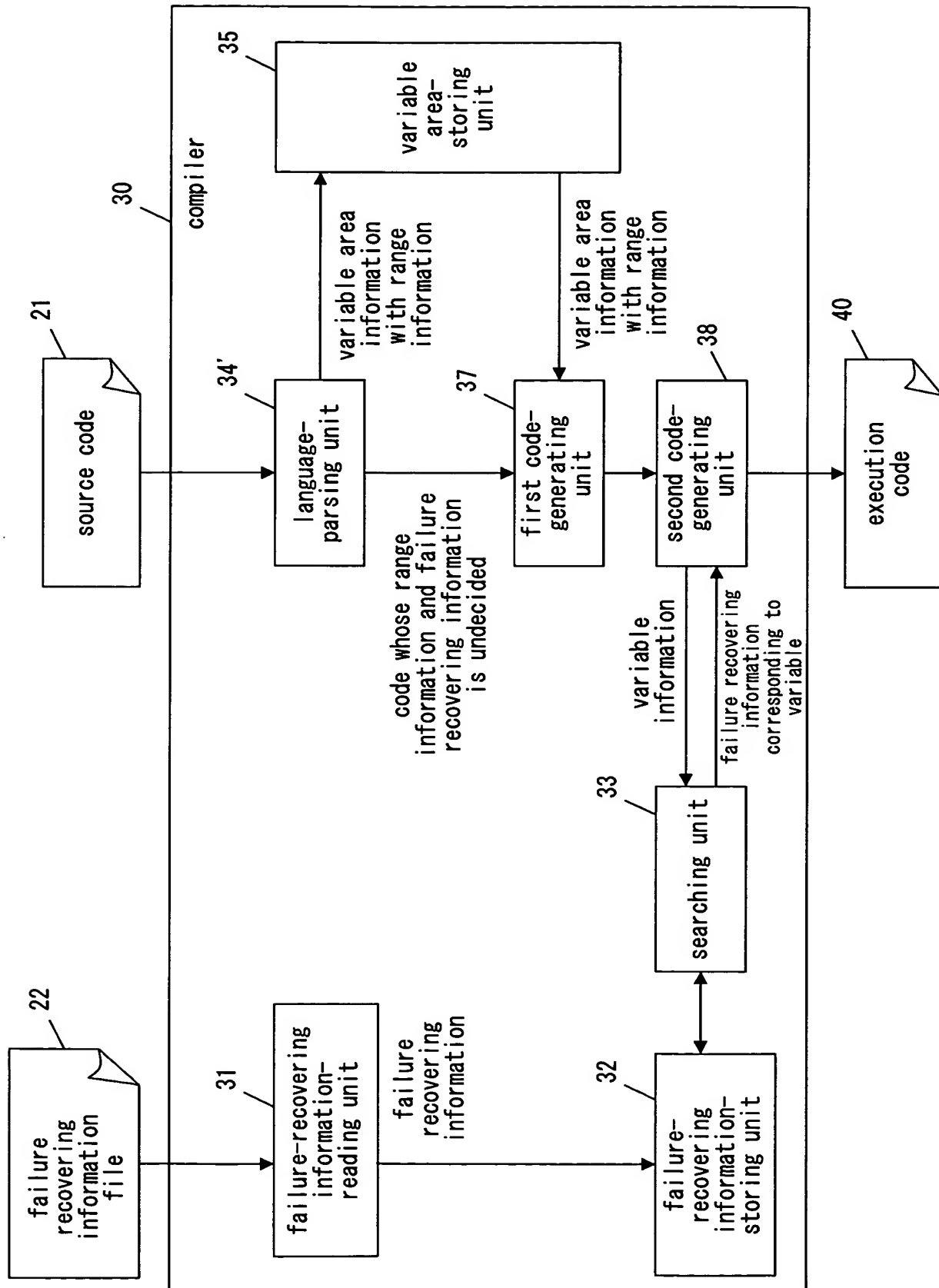


Fig. 15

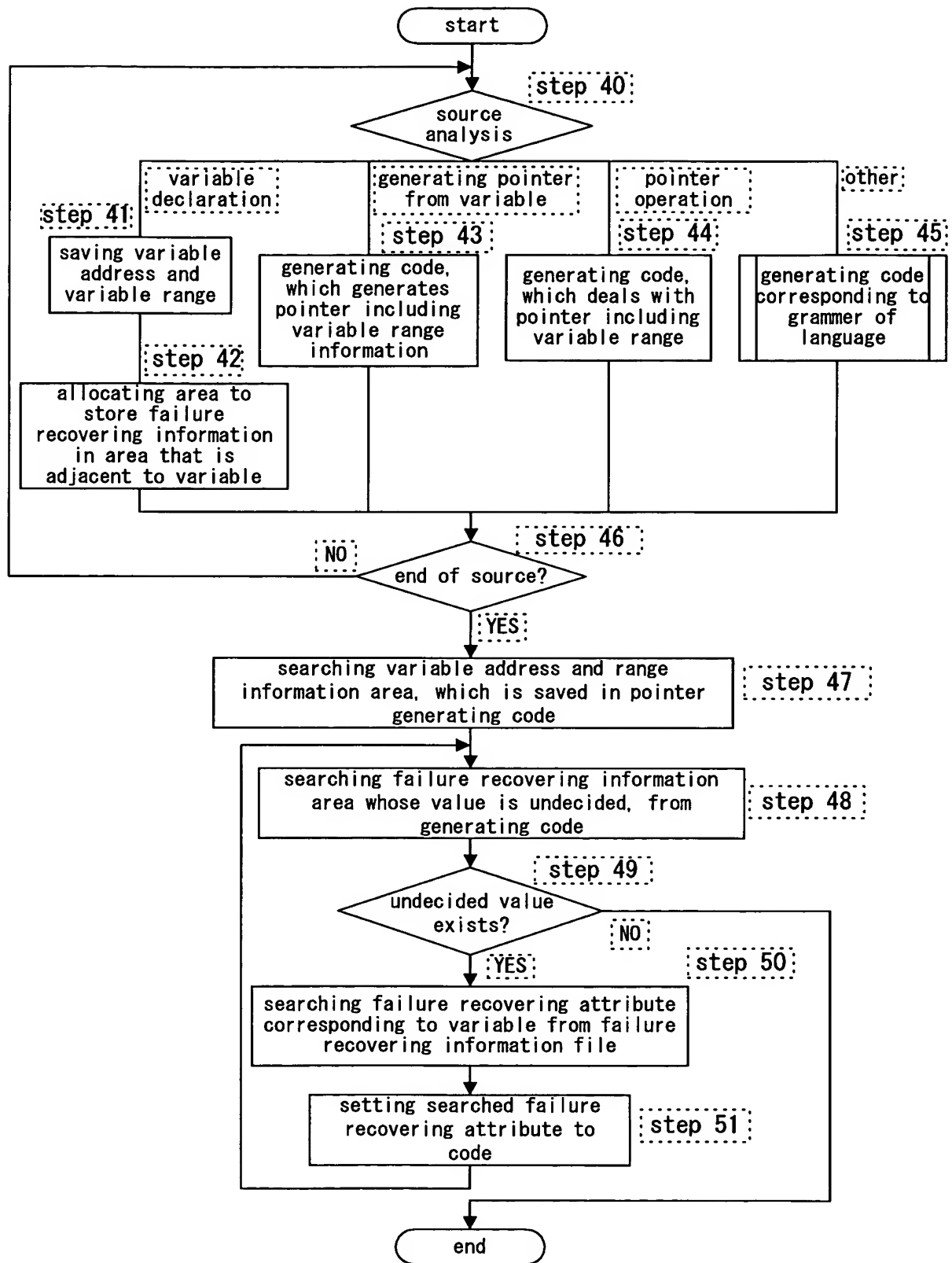


Fig. 16

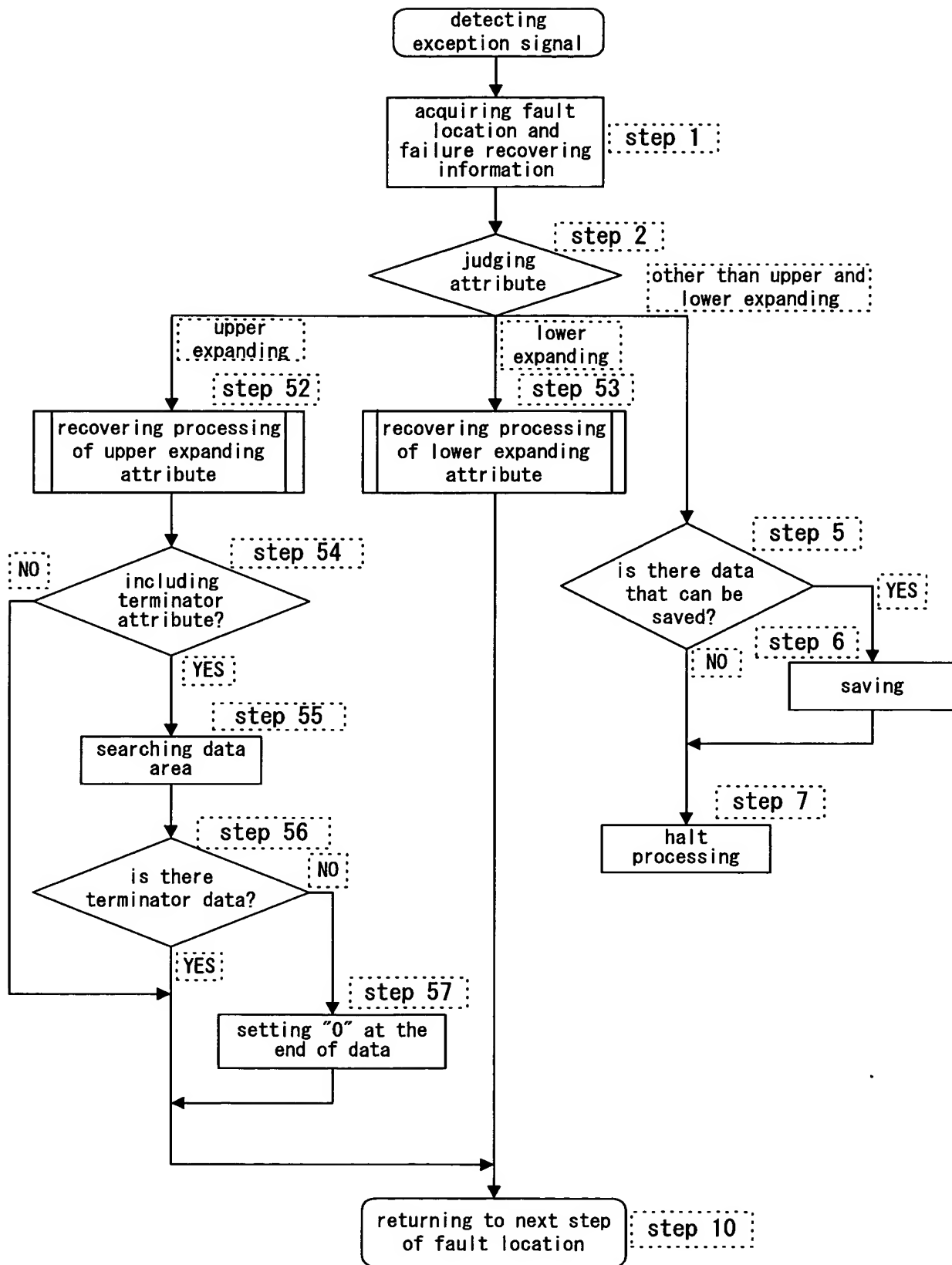


Fig. 17

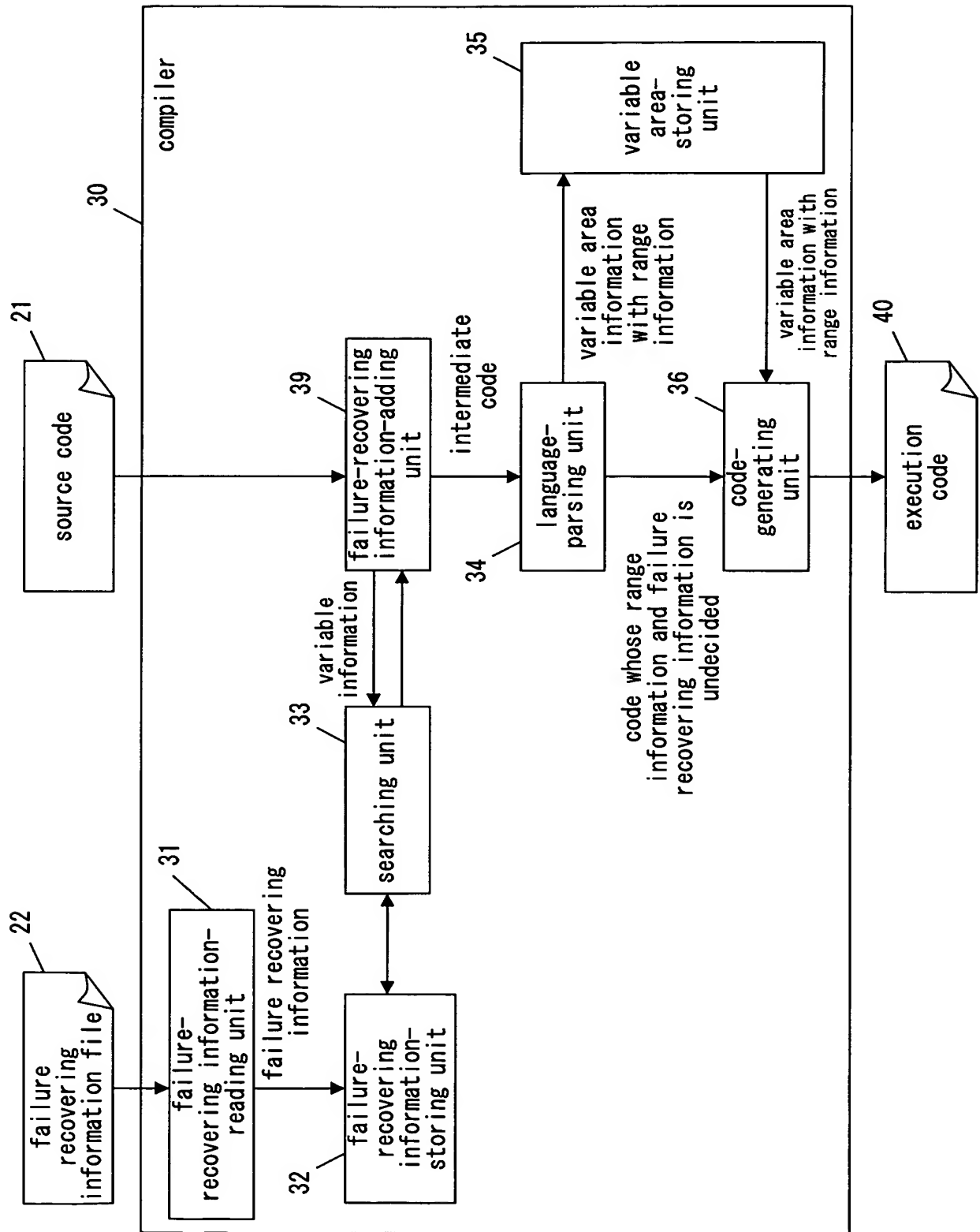




Fig. 18

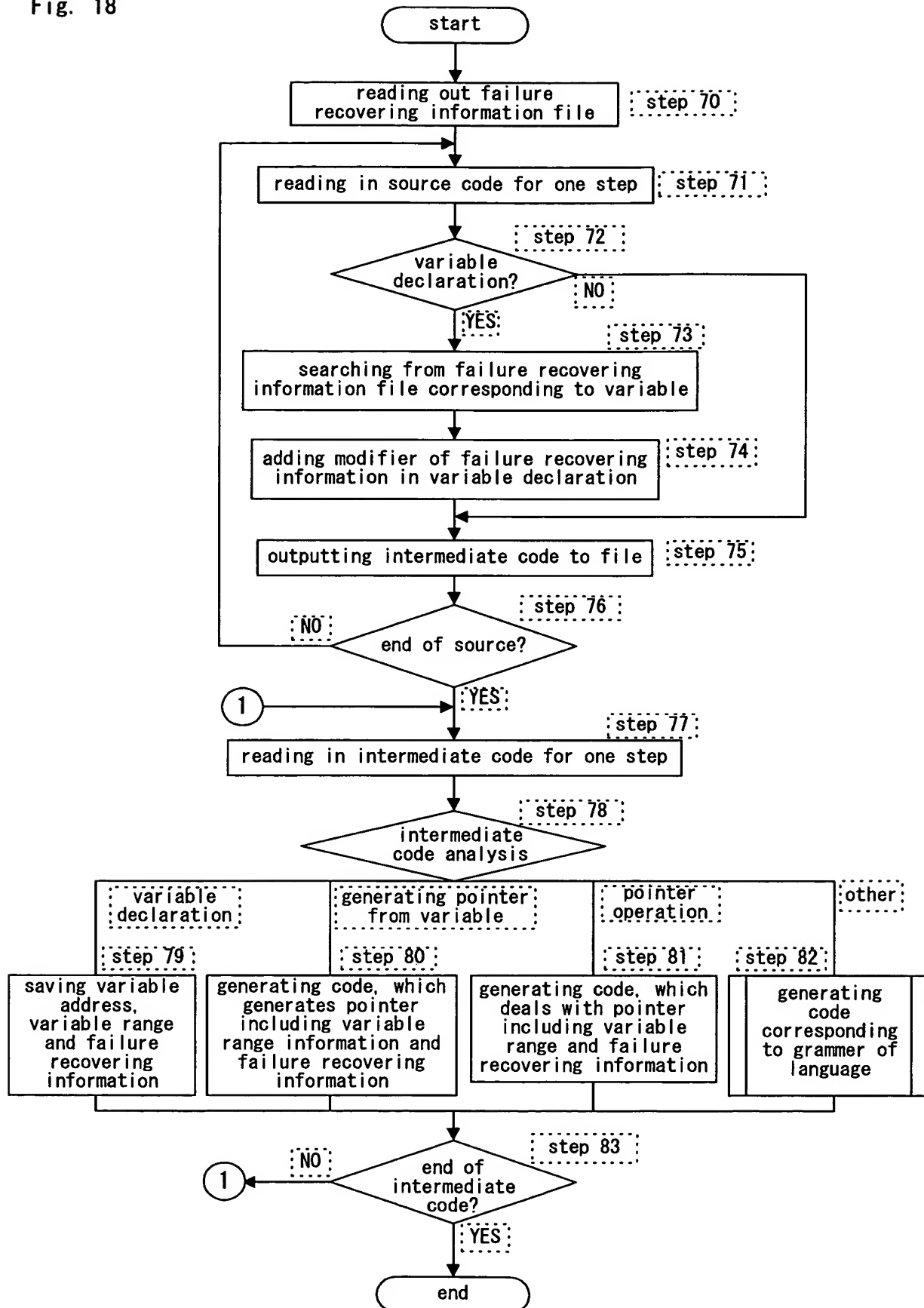


Fig. 19(a)

```
01: extern void input_str(char *str);
02:
03: int main()
04: {
05:     UPPER char buf[32];
06:     FIXED int len=0;
07:
08:     input_str(buf);
09:
10:     while ( buf[len] != 0)
11:         len++;
12:
13:     printf( "%dThis is a character\n" ,
14: len);
15:     return 0;
16: }
```

.....intermediate code  
.....(after processing of "main.c").....

Fig. 19(b)

```
01: void input_str(char *str);
02: {
03:     FIXED int c;
04:
05:     while( (c = getchar()) != EOF)
06:         *str++=c;
07: }
```

.....intermediate code (input\_int.c).....

Fig. 20

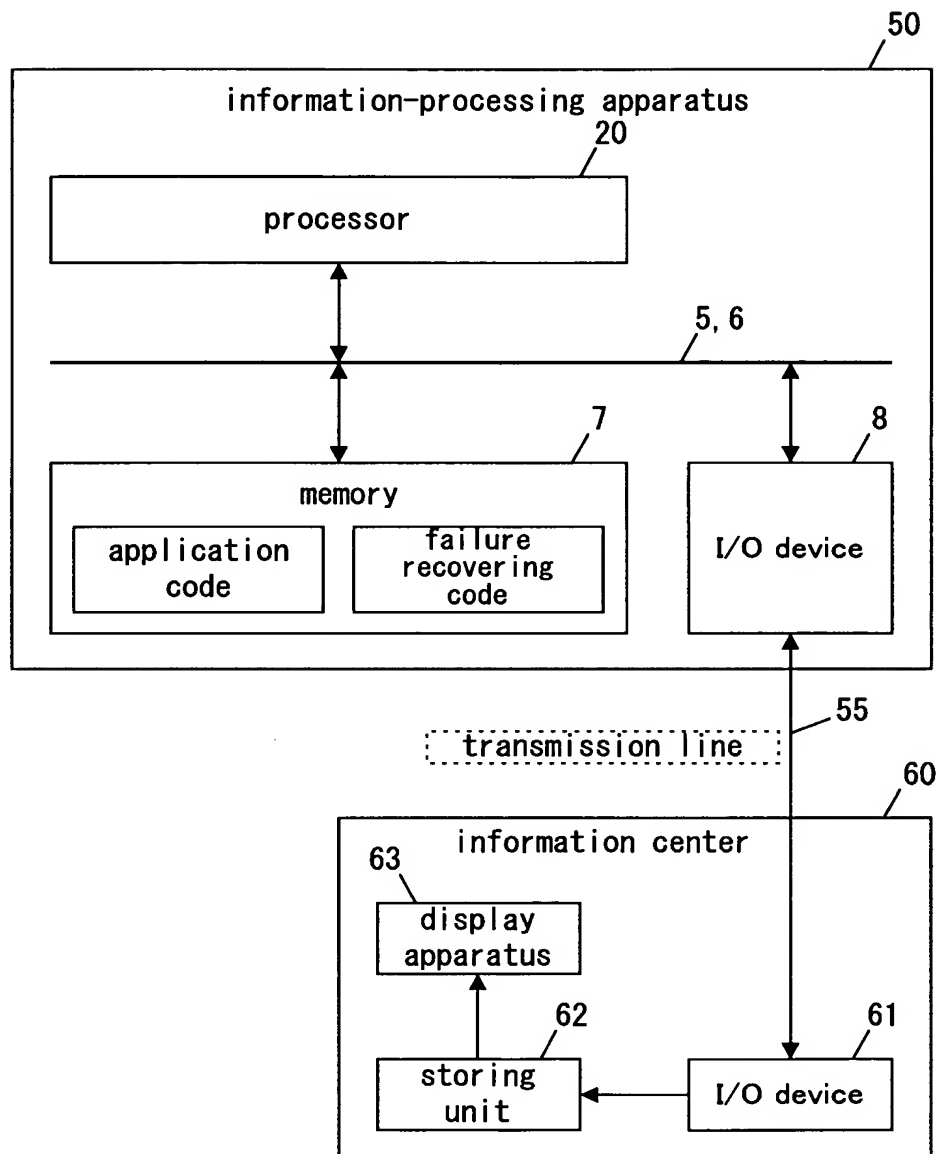


Fig. 21

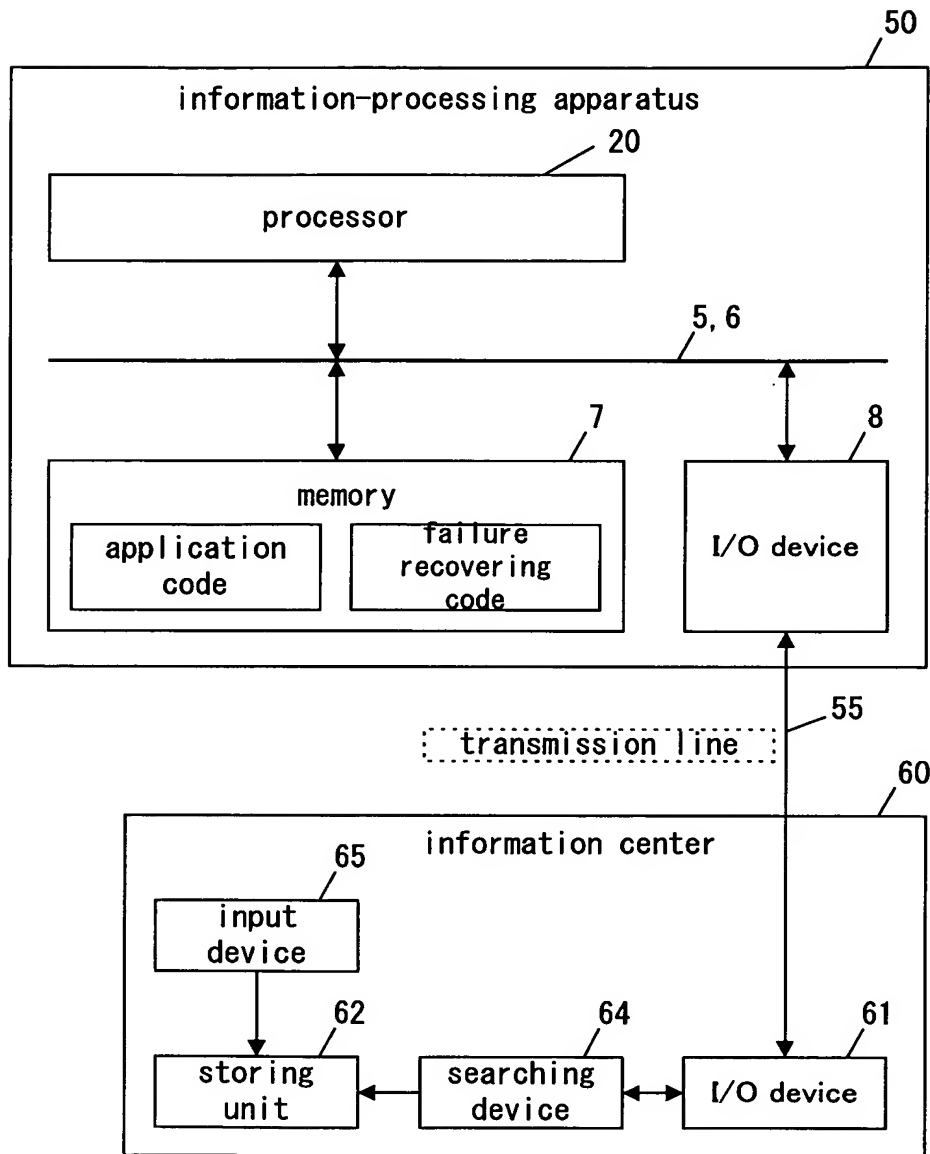


Fig. 22(a)

```
extern void read_str(char *str);  
  
int read_int()  
{  
    char buf[32];  
  
    read_str(buf);  
  
    return atoi(buf);  
}
```

source code

Fig. 22(b)

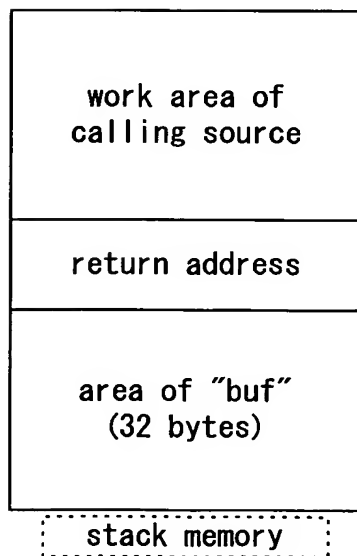


Fig. 22(c)

